



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

Vol. 5 No. 5

May 2002

● Extension Of Special (Y3) Third-Year Trainee Temporary Status

Since January 18, 2001, (earlier for the 03A, 06A, and 07A specialties) the department has accepted applications to take specialty examinations, based on “grandfathered” work experience in the 03A-Domestic Well, 06-Limited Energy (residential sound only), 06A-HVAC/refrigeration, 07-Nonresidential Maintenance, 07A-Lighting Maintenance, 07B-Residential Maintenance, and 10-Door, Window, Gate, and Similar Systems categories. The special (Y3) third-year training certificates issued to qualifying applicants to serve as temporary certification were to “*be revoked if the individual does not successfully complete the appropriate specialty examination before June 30, 2002*”.

We received a great number of applications near the end of the December 31, 2001 deadline and the licensing staff is working on a backlog of incorrect and incomplete applications. Many applicants have not yet received approval to test. We must ensure that all individuals have a reasonable amount of time to successfully complete their specialty electrician examination. We will extend the time that the special (Y3) third-year training certificates will be considered a temporary specialty electrician certificate for the purposes of working within the scope of the appropriate specialty without supervision and for supervising first- and second-year trainees in the proper ratio. **The June 30, 2002 deadline will be extended until December 31, 2002.** Any special (Y3) training certificates that expire during this time must be renewed through the normal process.

● Proposed 2.79% Electrical Fee Increase Will Be Effective June 28, 2002

The Office of Financial Management’s (OFM) maximum allowable fiscal growth rate factor for fiscal year 2002 is 2.79%. The fee increase is necessary to help offset inflation and maintain the financial health and operational effectiveness of the electrical program. The proposed fee increase applies to all electrical certification and licensing activities as well as electrical inspections. Full copies of the proposed fee changes can be obtained at:

www.lni.wa.gov/rules/Building-Construction/electrical/fees/Electrical.htm

Public hearings will be held:

May 21, 2002, 4 PM	Labor & Industries Building, Room S119, 7273 Linderson Way SW, Tumwater
May 22, 2002, 3 PM	Yakima School District Administration Offices, 104 N. 4th Avenue, Yakima

When the rules are adopted, the new *Electrical Fee Tables* and *Electrical Fee Worksheets* will be available on the electrical web-page under the [Electrical Fees](#) link and at L&I offices.

● Certification Renewal For Those Eligible To Be New Master Electricians

The new master electrician certification will combine the ability to do hands-on electrical work and the ability to perform the duties of the electrical administrator into a single certificate. The cost of the new single certificate will be equivalent to the annual cost of an administrator certificate, so master electricians will save money.

Individuals who currently have a general (01) administrator certificate and have held a (01) journeyman electrician certificate for four years (or have a specific specialty administrator certificate and have held a matching specialty electrician certificate for two years) will be eligible to receive the master journeyman electrician certificate (or master specialty electrician certificate) without taking an examination.

We will search our electrical database for individuals who meet the qualifications of the new law and are able to “grandfather” the master electrician certification. Starting sometime in mid-summer, persons who qualify will be given the option to become a master electrician when their renewal for either administrator or electrician certification comes due. The opportunity to “grandfather” will continue until June 30, 2005.

● Automotive Lubrication and Service Rooms

In general, lubrication and service rooms have less strict requirements than NEC Article 511—Commercial Garages based on the condition that “*no repair work is done except exchange of parts and routine maintenance requiring no use of electrical equipment, open flame, or the use of volatile flammable liquids.*” Most of these facilities do not require the more expensive classified wiring methods of the NEC, but activities such as changing gasoline fuel filters or otherwise opening up fuel systems for maintenance creates the potential for a hazardous environment. Facilities owners and/or operators, electrical installers, and electrical inspectors should note that if the business offers, advertises, or performs this type of maintenance, the basis for allowing lesser requirements than a standard commercial garage space no longer exists.

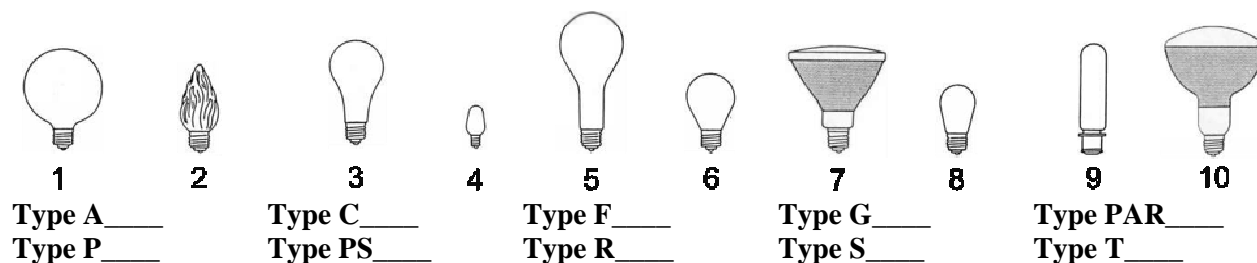
Lubrication and service rooms with pits that can accumulate flammable vapors are the most sensitive areas, and NEC 511-3(b) (exception) states “*Lubrication and service rooms without dispensing shall be classified in accordance with Table 514-2.*” Table 514-2 covers two types of lubrication or service rooms, those with dispensing and those without dispensing. “Dispensing” refers to locations where fuels such as gasoline are transferred to vehicles. The term does not refer to the ability to dispense oil or other non-volatile flammable liquids that are commonly used in this type of facility. Most of these businesses have no “dispensing,” however they must install exhaust ventilation in the pit in compliance with the requirements in Table 514-2 in order to make the pit a non-classified location. Crossing the line regarding gasoline fuel system maintenance work clearly changes the character of the business with consideration to the electrical installation requirements.

When a quick-lube facility performs gasoline fuel system maintenance, pits will lose the ability to be non-classified and will be a Class I, Division 1 or Class I, Division 2 location depending on whether or not the “*six air changes per hour*” ventilation requirements of NEC 511-3(b) are met. In such cases, NEC 511-3(a) then covers the floor area around a pit and states, “*the entire area up to a level of 18 in. (457 mm) above the floor shall be considered to be a Class I, Division 2 location.*” If additional ventilation of “*four air changes per hour*” in this area per NEC 511-3(a) (exception) is not provided, the floor area remains classified.

This means that other applicable code articles, such as NEC 511-6, Wiring above Class I Locations, and NEC 511-7, Equipment Above Class I Locations, must be applied. These two articles place restrictions on the wiring methods and equipment, including light fixtures, above the classified location in the lubrication or service room.

● Electrical Question of the Month

This Month's Question: Can you match the lamp type to the lamp picture?



Last Month's Question: What is the length of thermal expansion and contraction expected in a run of rigid non-metallic conduit 25 feet in length when the minimum temperature encountered is minus 5 degrees (F) and the maximum is 110 degrees (F)?

A) No change, B) 1.175 inches, C) 2.15 inches, D) 4.7 inches. **The answer is: B) 1.175 inches.**

[NEC Table 347-9(A), 115 degree temp. change=4.7 inches × (25 feet÷100 feet)=1.175 inches]